

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: **P-1400**

Agreement #: **30-084831**

2. Name of applicant:
Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:
**Mike Potter
Department of Natural Resources
411 Tillicum Lane
Forks, WA 98331
(360) 374-6131**

4. Date checklist prepared: **11/17/09**

5. Agency requesting checklist:
Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

- a. Auction Date:* **04/25/2010**
b. Planned contract end date (but may be extended): **9/30/2012**
c. Phasing: **NA**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

- a. Site preparation:* **None anticipated.**
b. Regeneration Method: **Hand plant first season after harvest.**
c. Vegetation Management: **Needs will be assessed 5-7 years after harvest.**
d.
e. Thinning: **Needs will be assessed 10-12 years after harvest.**

Roads: Approximately 4,643 feet of new construction and 24,763 feet of pre-haul maintenance is planned for this sale.

Rock Pits and/or Sale: P-1600 Pit, Ridges Pit and Mary Clark Pit will be used as part of this project. These pits may be expanded in the future for other timber sale proposals.

Other: Future forest management activities are anticipated to continue within the WAU and adjacent to the current proposal. Potential activities may include but are not limited to firewood salvage, hardwood slashing, pre-commercial thinning, commercial thinning and regeneration harvest. All future activities will be consistent with the DNR's Habitat Conservation Plan (HCP) and applicable policy and planning documents.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☒ 303 (d) – listed water body in WAU: ☒ temp ☐ sediment ☐ completed TMDL (total maximum daily load):

☒ Landscape plan: Clallam River LPU

☒ Watershed analysis: Hoko River WAU

☐ Interdisciplinary team (ID Team) report:

☒ Road design plan: Dated Oct. 15th 2009

☐ Wildlife report:

☐ Geotechnical report:

☐ Other specialist report(s):

☐ Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):

☒ Rock pit plan: P-1600 Pit, Mary Clark Pit, Ridges Pit

☒ Other: Policy for Sustainable Forests (July 2006); Final Habitat Conservation Plan (September 1997); State Soil Survey; OESF Marbled Murrelet Habitat Model; Forestry Handbook (August 1999). Sustainable Harvest Calculation (Sept 2004);, Hoko River Watershed Analysis. All documents may be obtained at the Olympic Region Office during the SEPA comment period.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
Not Applicable

10. List any government approvals or permits that will be needed for your proposal, if known.

☐ HPA ☐ Burning permit ☐ Shoreline permit ☒ Incidental take permit ☒ FPA ☒ Other: Board of Natural Resources Approval

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description).

- a. **Complete proposal description:** The proposed timber sale P-1400 is located approximately 6 miles southwest of Clallam Bay, Washington off of the DNR's P-1400 road system. The P-1400 timber sale is located within the Hoko Watershed Analysis Unit and the Clallam River Landscape Planning Unit of the Olympic Experimental State Forest. The legal description of this two unit proposal is Sections 25, 26, 35, 36 T32N-R13W W.M.

P-1400 is a two unit variable retention harvest of 48 year old even aged conifer timber encompassing approximately 155 gross acres with an approximate sale volume of 3,643 mbf. Of the total acres assessed for potential harvest approximately 29 acres have been left in riparian protection areas and approximately 9 acres have been left in Leave Tree Areas. Approximately 115 acres will be variable retention harvested and approximately 2 acres of Right of Way timber will be removed.

- b. **Timber stand description pre-harvest** (include major timber species and origin date), type of harvest, overall unit objectives. Major species include western hemlock, Douglas fir and Sitka spruce with a minor component of red alder and western red cedar. P-1400 consists of naturally regenerated, even aged second-growth conifer timber. The majority of this proposal was commercially thinned approximately 20 years ago. The average DBH found in this proposal is 15 inches. The understory consists of sword fern, salal and salmon berry.

Riparian protection measures were designed for all waters in and adjacent to this proposal in accordance with DNR's OESF Riparian strategy, (See details in section 3.a.1c)).

An average of eight trees per acre have been left aggregated and dispersed throughout the units. Large, structurally unique trees and snag recruitment trees were chosen for individual retention as well as exposed wind firm trees along windward edges of the stands. These marked leave trees and leave tree clumps will expedite the development of a more diverse, multi-storied canopy layer in the future stand.

Type of Harvest:

This sale will be harvested with ground based and cable logging methods. Ground based harvesting will be restricted to shovel on slopes less than 35%. Due to deep soils in the area of this proposal, no dozers or other skidding equipment will be allowed.

Overall unit objectives:

Objectives of this proposal are to provide financial benefit to the Clallam County Forest Board trust under the guidelines provided by Forest Practice rules, DNR's Habitat Conservation Plan (HCP) and the Hoko River Watershed Analysis.

Specific objectives include riparian protection, green tree retention plan, protection of soils and unstable slopes and procedures pertaining to threatened and endangered species. Riparian protection measures were designed for all waters in and adjacent to this proposal in accordance with our OESF Riparian Strategy. The sale will have green tree retention both dispersed and aggregated throughout the units. Large structurally unique trees were targeted for retention as well as exposed wind firm trees along the windward edges of the stands. These marked trees and clumps will expedite the future development of a more diverse, multi layered stand in the future.

Contract language and equipment limitations will help reduce soil impacts. No rubber tired skidders will be allowed and harvest operations will be suspended during periods of wet weather.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		4,643	1.3	0
Reconstruction		0		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	24			

In addition, 24,763 feet of optional pre haul maintenance is planned for this proposal. Pre haul maintenance will consist of brushing, spot patching, grading and ditching the existing road prism.

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map available at DNR region office, and/or color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

a. Legal description:

T32N R13W S25
T32N R13W S26
T32N R13W S35
T32N R13W S36

b. Distance and direction from nearest town (include road names):

This proposed timber sale is located approximately 6 miles southwest of Clallam Bay, Washington off the P-1400 road system

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
HOKO	45993.8	115

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under "SEPA Center" for a broader landscape perspective.)

This proposal is located in the Hoko WAU. The DNR manages approximately 11,201 acres or 24% of the total WAU acres. Immediate areas surrounding this proposal are composed of private, federal and state owned forest lands. The following tables break down land ownership within the WAU. (See color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

Land Manager	Acres	% of WAU
DNR	11201	24.4
Federal	329	0.7
Other State (Non-DNR)	942	2.0
Other Land (Private & Other Public Land)	33522	72.9

Over the past 5 – 10 years private industrial forestlands within the Hoko WAU have reached rotation age and are currently being harvested on an estimated rotation age of 40 years in accordance with the Forest Practice rules. The majority of these private lands are on their second or third rotation. During the past seven years there have been approximately 888 acres of harvest on DNR managed lands within the Hoko WAU. Additional stands in the WAU will be selected in the future for harvest as they meet the departments financial, ecological policies and mandates.

This proposal is located within the boundaries of the Olympic Experimental State Forest, which has specific riparian, spotted owl and marbled murrelet conservation strategies under the DNR's Habitat Conservation Plan (HCP). The HCP requires the Department to manage landscapes with the intent to preserve and enhance habitat used by fish and older-forest dependent species. This agreement substantially helps the Department to mitigate for any potential harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- * Retaining Riparian Management Zones (RMZ's) on all streams,
- * Deferring harvest on unstable slopes,
- * Retaining a minimum of 8 leave trees per acre dispersed and aggregated throughout the proposal.
- * Designing, constructing, and maintaining a road system to minimize potential adverse effects on the environment.
- Procedures pertaining to threatened and endangered species.

Several measures have been taken to ensure that this proposal will not contribute to the potential for adverse environmental impacts. As per our Habitat Conservation Plan riparian management zones with interior and exterior core buffers have been applied to all Type 3 and 4 waters. Interior core buffers are designed to protect the unstable portions of the stream banks, while exterior core buffers help to protect the inner core from potential wind-throw.

This proposal has three Type 3, ten Type 4 and eight Type 5 streams associated with it. The Type 3 streams have been protected with an estimated 50-125 foot interior core and a 150 foot wind buffer. The Type 4 streams have been protected with an estimated 20-30 foot interior core and a 50 foot wind buffer. The Type 5 streams have been protected with variable width retention buffers.

The Forest Practices risk assessment maps showed portions of the proposal to have potential landforms that may be unstable. These areas, the eastern, northern and western boundaries of Unit 1 and the southern boundary of Unit 2 have been reviewed in the field by a State Lands slope stability specialist. Two deep seated landslides were identified in the vicinity of Unit 1. Both of these features as well as the associated ground water recharge areas have been removed from the harvest area.

The DNR mitigates for the potential of significant adverse environmental impacts to northern spotted owls in the OESF by implementing the HCP strategy. This strategy established threshold percentages for spotted owl habitat on DNR-managed lands for Landscape Planning Units (LPU). Each LPU is managed to achieve and maintain at least 20% Old Forest Habitat and at least 40% of Old and Young Forest (or Structural) Habitat types taken together according to a schedule of habitat enhancement and harvest activities developed within the Forest Land Plan. Forest Land Planning has been initiated but not implemented. The sale area is not considered structural habitat according to the OESF NSO Habitat Model. Variable retention harvests in this proposal totaling approximately 115 net acres are under 50 years of age and will not be subject to the acreage limits in the OESF's interim HCP implementation procedure for northern spotted owls.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐ Flat, ☐ Rolling, ☒ Hilly, ☐ Steep Slopes, ☐ Mountainous, ☐ Other:

- 1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone). The Hoko River WAU is low in elevation. Approximately 55% of the WAU is in the lowland zone with 40% of the WAU in the rain dominated zone and only 5% in the peak rain on snow zone. The average annual rainfall in the WAU is 111". The elevation ranges from 0' to 2,655' with the average being 698'. There are a total of 45,994 acres in the WAU. Major timber types are Douglas-fir, sitka spruce and western hemlock.
- 2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s). This timber sale proposal is located at the low elevations of the WAU on terrain ranging from relatively gentle to moderately steep slopes. The gentle slopes are found on the northern interior of Unit 1 and Southern boundary of Unit 2. The sale boundaries are designed to avoid harvest on unstable slopes.

b. What is the steepest slope on the site (approximate percent slope)?
Approximately 60% on 5% of the sale area.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
6001	LOAM	30-65	80	MEDIUM	HIGH
5734	OZETTE-ANDEPTIC UDORTHENTS-COMPLEX	50-80	35	No Data	No Data

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

- 1) Surface indications: The statewide landslide inventory (LSI) screening tool indicates the presence of polygons in the vicinity of the proposed harvest units. Trained foresters designed this proposal to avoid harvest on any potentially unstable slopes. Two areas in the vicinity of Unit 1 were identified as deep seated landslides. These areas, as well as the ground water recharge areas associated with them have been removed from the harvest area.
- 2) Is there evidence of natural slope failures in the sub-basin(s)?
☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: There is some evidence of natural slope failures in the steeper, higher areas of the WAU. These are generally associated with deep-seated landslides, slope gradients that exceed 70 percent, steep stream inner gorges and headwalls.
- 3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: Associated management activity: There are many areas within the WAU where slope failures have occurred mainly associated with past road construction and timber harvest practices and broadcast burning on steep, unstable areas.
- 4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☐ No ☒ Yes, describe similarities between the conditions and activities on these sites: There are areas of potential slope instability found within the inner cores of some streams in and around the vicinity of this proposal. However, these areas are excluded from this proposal.

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.
This proposal was designed to avoid operations on or near unstable slopes. Harvest systems have been designed to limit ground based logging to slopes less than 35% and will not be permitted during periods of wet weather.
The eastern, northern and western boundaries of Unit 1 and the southern boundary of Unit 2 have been reviewed in the field by a State Lands slope stability specialist.
The Forest Practices risk assessment maps showed portions of the proposal to have potential landforms that may be unstable. These areas, the eastern, northern and western boundaries of Unit 1 and the southern boundary of Unit 2 have been reviewed in the field by a State Lands slope stability specialist. Two areas in the vicinity of Unit 1 were identified as deep seated landslides. These areas, as well as the ground water recharge areas associated with them have been removed from the harvest area.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads:1.3 Approx. acreage new landings:0.5 Fill source: Ridges pit, P-1600 pit, Mary Clark pit
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Yes. A small amount of incidental surface erosion could occur during the course of road maintenance and harvest activities. Mitigating measures outlined in question h. below will minimize and control any possible erosion.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
Less than 1%
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)
A field review was conducted and found two Forest Practices rule identified features in unit 1 that are at a low risk of delivery potential, both features are recharge areas for deep seated landslides and were bounded out of the sale. Harvesting and road construction will be restricted during periods of heavy rainfall when rutting and surface erosion may occur. Roads will be constructed with properly located ditches, ditch outs and cross drains to divert water onto stable forest floor and/or into stable natural drainages. Ground based operations will be suspended during periods of wet weather or wet soil conditions when rutting of skid or shovel roads begins. Leave trees are scattered and clumped throughout the sale units. Harvested areas will be reforested within one growing season of the expiration of the contract.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
Insignificant amounts of engine exhaust from logging equipment and dust from passage of log trucks. Logging slash, if burned, will be burned adhering to the State's smoke management plan.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
None
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:
None

3. Water

- a. Surface:
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map available at DNR region office, or forest practice application base maps.)*
- a) Downstream water bodies:
Leyh Cr., Coke Cr., Hoko River, Strait of Juan de Fuca,
- b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Leyh Cr., Coke Cr., Unnamed	Type 3	3	Estimated interior core buffer of 50-125 feet and a 150 foot wind buffer.
Unnamed	Type 4	10	Estimated interior core buffer of 20-30 feet and a 50 foot wind buffer.
Unnamed	Type 5	8	Variable width retention buffers.

- c) *List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.*
 As per our Habitat Conservation Plan riparian management zones with interior and exterior core buffers have been applied to all Type 3 and 4 streams. Interior core buffers are designed to protect the unstable portions of the stream banks, while exterior core wind buffers help to protect the inner core from potential wind-throw.
 Unit 1 has two Type 3 streams, eight Type 4 streams and five Type 5 streams associated with it. The Type 3 streams have been protected with an estimated 50-125 foot interior core and a 150 foot wind buffer. The Type 4 streams have been protected with an estimated 20-30 foot interior core and a 50 foot wind buffer. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any Type 5 streams.

 Unit 2 has one Type 3 stream, two Type 4 streams and three Type 5 streams associated with it. The Type 3 stream has been protected with an estimated 50-125 foot interior core and a 150 foot wind buffer. The Type 4 streams have been protected with an estimated 20-30 foot interior core and a 50 foot wind buffer. The Type 5 streams have been protected with varying width retention buffers. No equipment will be allowed to operate within 30 feet of any Type 5 streams.
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐ No ☒ Yes (See RMZ/WMZ table above and timber sale map available at DNR region office.)
Description (include culverts): One culvert will be replaced on a Type 4 stream on the P-1400 road. (See RMZ/WMZ table above and timber sale map available at DNR region office.)
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
 None
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
☒ No ☐ Yes, description:
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒ No ☐ Yes, describe location:
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒ No ☐ Yes, type and volume:
- 7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
 This WAU does contain terrain susceptible to surface and/or mass erosion. Generally, the high potential areas are located in the higher elevations and are associated with steep unstable terrain. Surface erosion control/prevention measures discussed in B.1.h. would minimize or prevent delivery to surface waters.
- 8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☐ No ☒ Yes, describe changes and possible causes:
 There is some evidence of changes to stream channels on some streams within the WAU due to both natural and human caused events. Most are located in the higher elevations of the WAU on steep terrain.
- 9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☐ No ☒ Yes, explain:
 This proposal will have minimal effect on water quality due to sale design and protection measures as described throughout this document.
- 10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?
 Approximately 2.9 miles of road per square mile within the Hoko River WAU.

 Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☐ No ☒ Yes, describe:
 Some roads within the WAU intercept sub-surface flow and deliver it to streams. In recent years an emphasis has been placed on using more cross-drain culverts both on new road construction and on existing road reconstruction. This has resulted in more ditch water being diverted back to the forest floor.
- 11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☒ No ☐ Yes, approximate percent of WAU in significant ROS zone.
 Approximate percent of sub-basin(s):
- 12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
- 13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐ No ☒ Yes, describe observations:
 As described above, some of the larger stream banks can erode during periods of high water and steep headwall areas can fail during rain-on-snow events. The mass wasting described in B.1.d.2. above occurs during peak flow events and can result in accelerated sediment aggradations. Lack of LWD can contribute to stream channelization during peak flow events.

- 14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.
This proposal should not measurably change the timing, duration, or amount of water in a peak flow event. The harvest prescription, design, unit size, and location (not in the Rain-on-Snow Zone), will minimize this proposal's potential contribution to peak flows.
- 15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒ No ☐ Yes, possible impacts:
- 16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.
Maintaining large RMZ's on streams that maintain bank stability, hydrologic functions and provide recruitment of LWD. Recent increases in the number and spacing of culverts to divert water to the forest floor. See B.1.h, B.3.a.1.c and A.13 for additional protection measures.

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
No
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
Does not apply.
- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒ No ☐ Yes, describe:
- a) Note protection measures, if any.
None

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Storm water runoff will be collected by road ditches and diverted through cross drain culverts onto the forest floor.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
No
- a) Note protection measures, if any.
None

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)
All streams associated with this proposal have had buffers applied. Roads have ditches, ditch outs, and cross drains to divert water to stable forest floor material, and intercepted groundwater will be directed and discharged along its original flow path.

4. Plants

a. Check or circle types of vegetation found on the site:

- ☒ deciduous tree: ☒ alder
☒ evergreen tree: ☒ Douglas fir,
☒ western hemlock, ☒ Sitka spruce,
☒ red cedar,
☒ shrubs: ☒ huckleberry, ☒ salmonberry, ☒ salal, ☒ devil's club

- b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*
Approximately 3,643 mbf of 48 year old conifer timber will be harvested with this proposal.

- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. *(See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")*
Unit 1 is bordered by a RMZ and state 48 year old timber to the north, RMZ to the east, mature timber and the P-1400 road to the south and RMZ to the west.
Unit 2 is bordered by 48 year old timber and the P-1400 road to the north, RMZ to the south, RMZ and state 100 year old timber to the west and 50 year old private timber to the east.

- 2) *Retention tree plan:*
Retention trees have been left both aggregated and dispersed throughout the sale proposal. Dominant trees and large structurally unique trees were targeted for retention. Large structurally unique trees and trees showing windfirmness were targeted for dispersed retention. Clumped retention trees were also concentrated around stable Type 5 streams. All dispersed retention has been marked with blue painted bands. There are 223 individually marked retention trees and 207 trees in Leave Tree Areas in Unit 1. Unit 2 has 262 individually marked retention trees and 342 trees are in Leave Tree Areas.

- c. List threatened or endangered *plant* species known to be on or near the site.

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
Our retention tree plan which is leaving eight wildlife and legacy trees per acre and the riparian buffers left on all streams adjacent to the proposal will enhance diversity on the site. The variable retention harvest areas will be reforested with a mixture of conifer species including Douglas fir and red cedar to promote species diversity in the next stand.

5. Animal

- a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒ songbirds,
mammals: ☒ deer, ☒ bear, ☒ elk, ☒ beaver,
fish: ☒ salmon, ☒ trout,

- b. List any threatened or endangered species known to be on or near the site (*include federal- and state-listed species*).

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
1	76132	SPOTTED OWL: Site:789-CLALLAM RIVER	THREATENED	ENDANGERED

- c. Is the site part of a migration route? If so, explain.
☒ *Pacific flyway* ☐ *Other migration route:* *Explain if any boxes checked:*
This site is part of the Pacific flyway but is not used extensively for resting or feeding by waterfowl.

- d. Proposed measures to preserve or enhance wildlife, if any:
**The DNR mitigates for the potential of significant adverse environmental impacts to northern spotted owls in the OESF by implementing the HCP strategy. This strategy established threshold percentages for spotted owl habitat on DNR-managed lands for Landscape Planning Units (LPU). Each LPU is managed to achieve and maintain at least 20% Old Forest Habitat and at least 40% of Old and Young Forest (or Structural) Habitat types taken together according to a schedule of habitat enhancement and harvest activities developed within the Forest Land Plan. Forest Land Planning has been initiated but not implemented. Variable retention harvests in this proposal totaling approximately 115 acres are under 50 years of age and will not be subject to the acreage limits in the OESF's interim HCP implementation procedure for northern spotted owls. The sale area is not considered structural habitat according to the OESF NSO Habitat Model.
The sale area was determined to be non murrelet habitat by the OESF marbled murrelet habitat assessment.**

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Does not apply.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
Does not apply.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
Does not apply.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.
- Describe special emergency services that might be required.
Fire suppression, hazardous waste cleanup.
 - Proposed measures to reduce or control environmental health hazards, if any:
**The timber sale contract requires the purchaser to minimize risk of fire and does not allow for the disposal of any kind of waste on any State lands.
Pump trucks and/or pump trailers will be required on site during fire season.**
- b. **Noise**
- What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

- None**
- 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
Noise from heavy equipment and log truck traffic while the sale is active.
- 3) Proposed measures to reduce or control noise impacts, if any:
None

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? (*Site includes the complete proposal, e.g. rock pits and access roads.*)
Commercial Forest Land
- b. Has the site been used for agriculture? If so, describe.
No
- c. Describe any structures on the site.
None.
- d. Will any structures be demolished? If so, what?
None.
- e. What is the current zoning classification of the site?
Forest Land.
- f. What is the current comprehensive plan designation of the site?
Commercial forest use.
- g. If applicable, what is the current shoreline master program designation of the site?
Does not apply.
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
No
- i. Approximately how many people would reside or work in the completed project?
Does not apply.
- j. Approximately how many people would the completed project displace?
Does not apply.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
Does not apply.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The design of this project is consistent with current comprehensive plans and procedures pertaining to DNR's Habitat Conservation Plan, the state Forest Practices Act, the Clallam River Landscape Plan and the Hoko River Watershed Analysis.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
Does not apply.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
Does not apply.
- c. Proposed measures to reduce or control housing impacts, if any:
Does not apply.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
Not applicable.
- b. What views in the immediate vicinity would be altered or obstructed?
None
- 1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☒ **No** ☐ **Yes, viewing location:**
- 2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☒ **No** ☐ **Yes, scenic corridor name:**
- 3) *How will this proposal affect any views described in 1) or 2) above?*
Does not apply.
- c. Proposed measures to reduce or control aesthetic impacts, if any:
Our retention tree plan which is leaving an average of eight trees per acre will leave a visual component dispersed over the landscape. In addition to this the sale area will be reforested the first season after harvest with conifer species native to this site.

11. **Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Does not apply.
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
Does not apply.
- c. What existing off-site sources of light or glare may affect your proposal?
Does not apply.
- d. Proposed measures to reduce or control light and glare impacts, if any:
Does not apply.

12. **Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?
Dispersed informal recreation in the form of hunting, berry picking, sightseeing, etc.
- b. Would the proposed project displace any existing recreational uses? If so, describe:
No
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None

13. **Historic and Cultural Preservation**

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
A check of the Department of Archaeology and Historic Preservation (DAHP) database and TRAX using a Planning and Tracking Special Concerns report shows no known cultural resources on or near the site. A check of the cultural resources layer on the State Upland viewing tool shows no cultural resources on or near the site. During timber sale preparation, trained foresters found nothing on or near the site to indicate any potential cultural resource.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None.
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
Does not apply.

14. **Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
The sale proposal will be accessed via Highway 112, the P-1000 and P-1400 forest road systems.
 - 1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*
This proposal will not affect the overall transportation system in the area.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No
- c. How many parking spaces would the completed project have? How many would the project eliminate?
None.
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
Yes, this proposal will require 4,643 feet of optional new construction. Additionally there will be 24,763 feet of optional pre-haul maintenance which includes grading, brushing and ditching the existing road prism.
 - 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*
This proposal is located in an area that sees heavy use from timber related uses and woodland recreational traffic and will have no additional impacts to the transportation system.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
Approximately 12- 20 trips per day during peak harvest activity
- g. Proposed measures to reduce or control transportation impacts, if any:
None

15. **Public Services**

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No
- b. Proposed measures to reduce or control direct impacts on public services, if any.
None

16. **Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
Does not apply.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
Does not apply.

C. **SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by:
Mike Potter
Title: **Coast Forester 2**
Date: **11/23/09**

